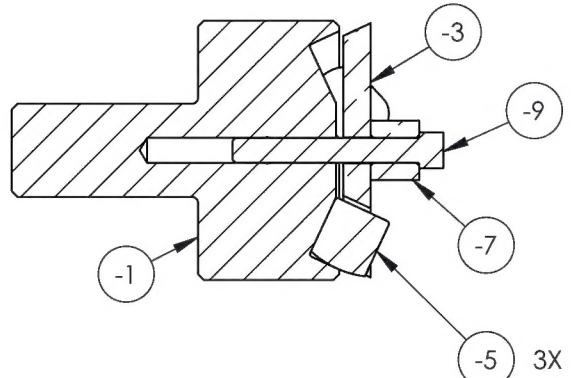
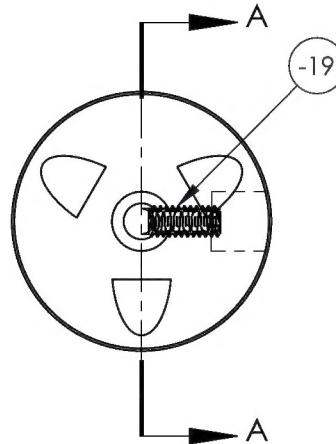
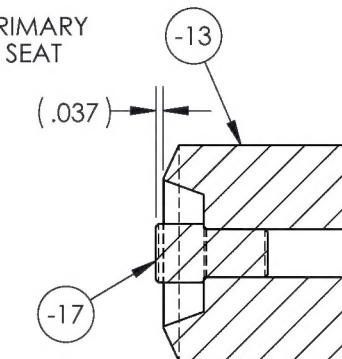
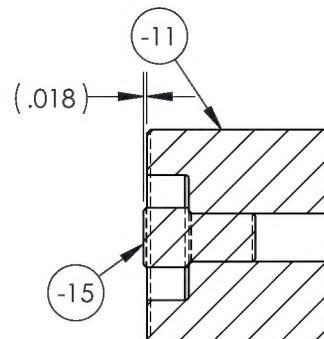


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REVISIONS							
REV	ECR	DESCRIPTION			DATE	INITIAL	APPROVED
1	14-0185	CH'D TITLEBLOCK WAS RED BARN IS DART. -1 CH'D SPECIFICATION WAS $\varnothing 1-1/2 \times 1-7/8$ IS $\varnothing 1-3/8 \times 1-7/8$ , CH'D ENGRAVE NOTE, CH'D DIM WAS #8-32 $\varnothing .675$ IS #8-32 UNC-2B $\varnothing .187 \pm .31$ . -9 CH'D MATERIAL WAS 01 IS STEEL, CH'D SPECIFICATION WAS $\varnothing 3/8 \times 1-1/8$ IS MCMASTER-CARR #98378A909 (MODIFIED), CH'D DIM WAS $\varnothing .241$ IS $(\varnothing .188)$ , WAS $\varnothing .129 + .000 -.001$ IS $(\varnothing .129)$ . -11 CH'D ENGRAVE NOTE, -13 CH'D ENGRAVE NOTE.			10/15/2014	DJN	JAG



SECTION A-A

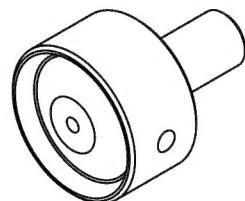
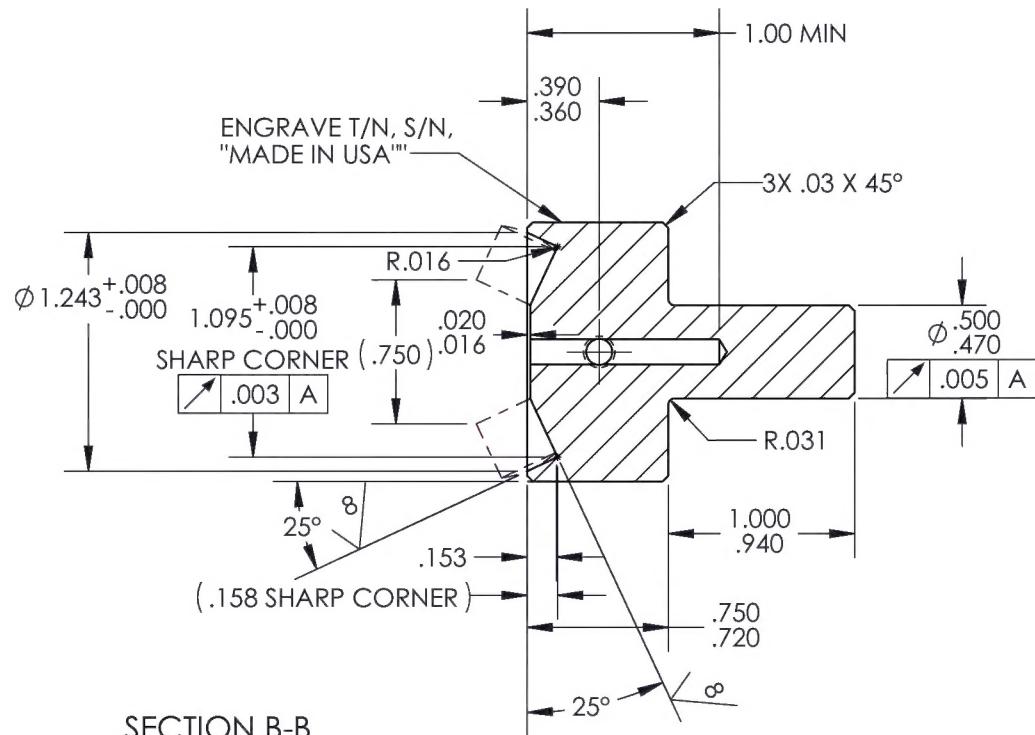
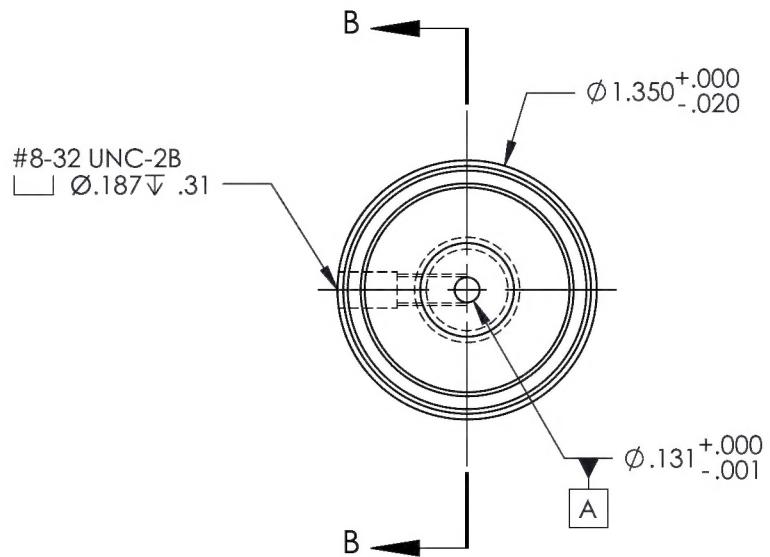


ASSY QTY	ASSY QTY	B/O	Part #	UNIT QTY	Description	Material	B/O INFORMATION OR SPECIFICATIONS	PG.
			-1	1	ROLLER FIXTURE	DRILL ROD	$\varnothing 1-3/8 \times 1-7/8$	2
			-3	1	RETAINER	BRONZE RND BAR	$\varnothing 1-1/2 \times 1-1/4$	3
			-5	3	ROLLER	STEEL	GAUGE PIN MSC #89031009	4
			-7	1	GUIDE	BRONZE RND BAR	$\varnothing 1/2 \times 3/8$	5
			-9	1	PIN	STEEL	MCMASTER-CARR #98378A909 (MODIFIED)	6
			-11	1	PRIMARY SEAT	4140 Q & T	$\varnothing 1-1/4 \times 1-1/8$	7
			-13	1	SECONDARY SEAT	4140 Q & T	$\varnothing 1-1/4 \times 1-1/8$	8
			-15	1	LOCATING PIN	1018	$\varnothing 3/8 \times 3/4$	9
			-17	1	LOCATING PIN	1018	$\varnothing 3/8 \times 3/4$	10
B/O	-19	1			SOCKET HEAD SET SCREW	S.S.	8-32 X 3/8 MCMASTER-CARR #97705A406	1

DART AEROSPACE					
TITLE			REV		
TRI-ROLLER SWAGING TOOL			1		
DWG NO.			RBST2854		
MAT'L		DRAWN BY:	GILBERT		
APPROVED		D Weil			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES					
.XXX $\pm .005$ FRACTIONS $\pm 1/8$					
.XX $\pm .01$ ANGLES $\pm 5^\circ$					
.X $\pm .1$					
SPEC					
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R			USED ON MODEL		
2. DIMENSIONAL LIMITS APPLY AFTER PLATING			212-310-701-103		
SCALE	1:1	DATE	3/29/2011		
SHEET 1 OF 10					

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REVISIONS						
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED	
1	14-0185	-1 CH'D ENGRAVE NOTE, CHG'D DIM WAS #8-32 $\varnothing$ .675 IS #8-32 UNC -2B $\varnothing$ .187 $\varnothing$ .31.	10/15/2014	DNJ	JAG	



(-1)

## NOTES:

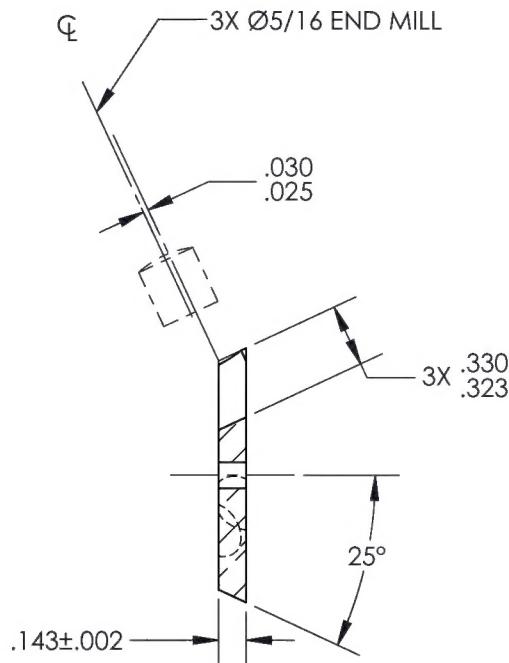
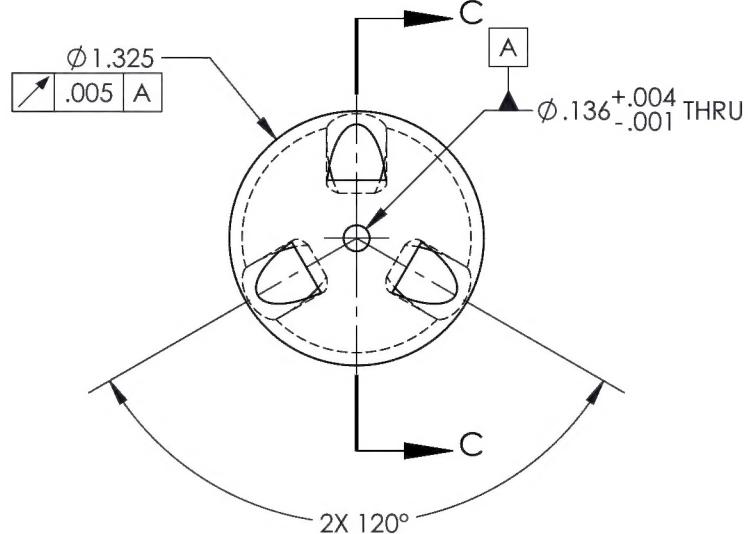
**NOTES:**

1. ROLLER RACE SURFACES MUST HAVE SMOOTH APPEARANCE, FREE FROM MACHINING MARKS AND GROOVES.
2. DO FIRST ARTICLE INSPECTION BEFORE HEAT TREATING.

	
TITLE	
TRI-ROLLER SWAGING TOOL	
DWG NO.	RBST2854-1
REV 1	
MAT'L DRILL ROD	
DRAWN BY: GILBERT	
UNLESS OTHERWISE SPECIFIED	
DIMENSIONS ARE IN INCHES	
.XXX $\pm$ .005 FRACTIONS $\pm$ 1/8	
.XX $\pm$ .01 ANGLES $\pm$ .5°	
X $\pm$ .1	
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
APPROVED	
HEAT TREAT	
FINISH	
SPEC	
USED ON MODEL	
212-310-701-103	
SCALE	1:1
DATE	5/20/2013
SHEET 2 OF 10	

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REV	ECR	REVISIONS	DESCRIPTION	DATE	INITIAL	APPROVED
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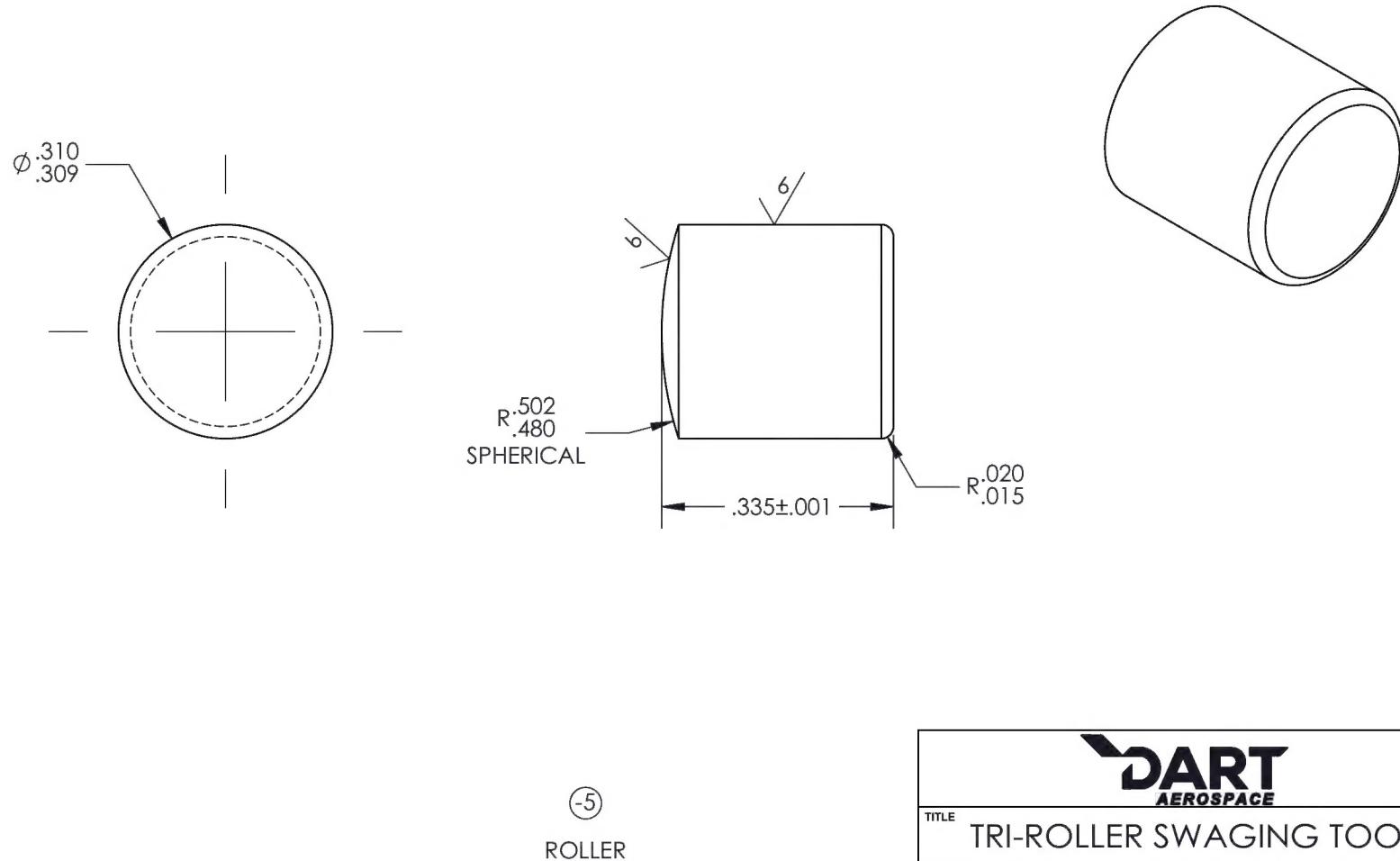
SECTION C-C

(-3)  
RETAINER

<b>DART</b> AEROSPACE	
TITLE TR-ROLLER SWAGING TOOL	
DWG NO.	RBST2854-3
MAT'L	DRAWN BY: GILBERT
BRONZE RND BAR	APPROVED <i>D Weil</i>
UNLESS OTHERWISE SPECIFIED	
DIMENSIONS ARE IN INCHES	
.XXX $\pm .005$	FRACTIONS $\pm 1/8$
.XX $\pm .01$	ANGLES $\pm .5^\circ$
.X $\pm .1$	
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	HEAT TREAT FINISH
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	SPEC
	USED ON MODEL
	212-310-701-103
SCALE	1:1
DATE	5/20/2013
SHEET 3 OF 10	

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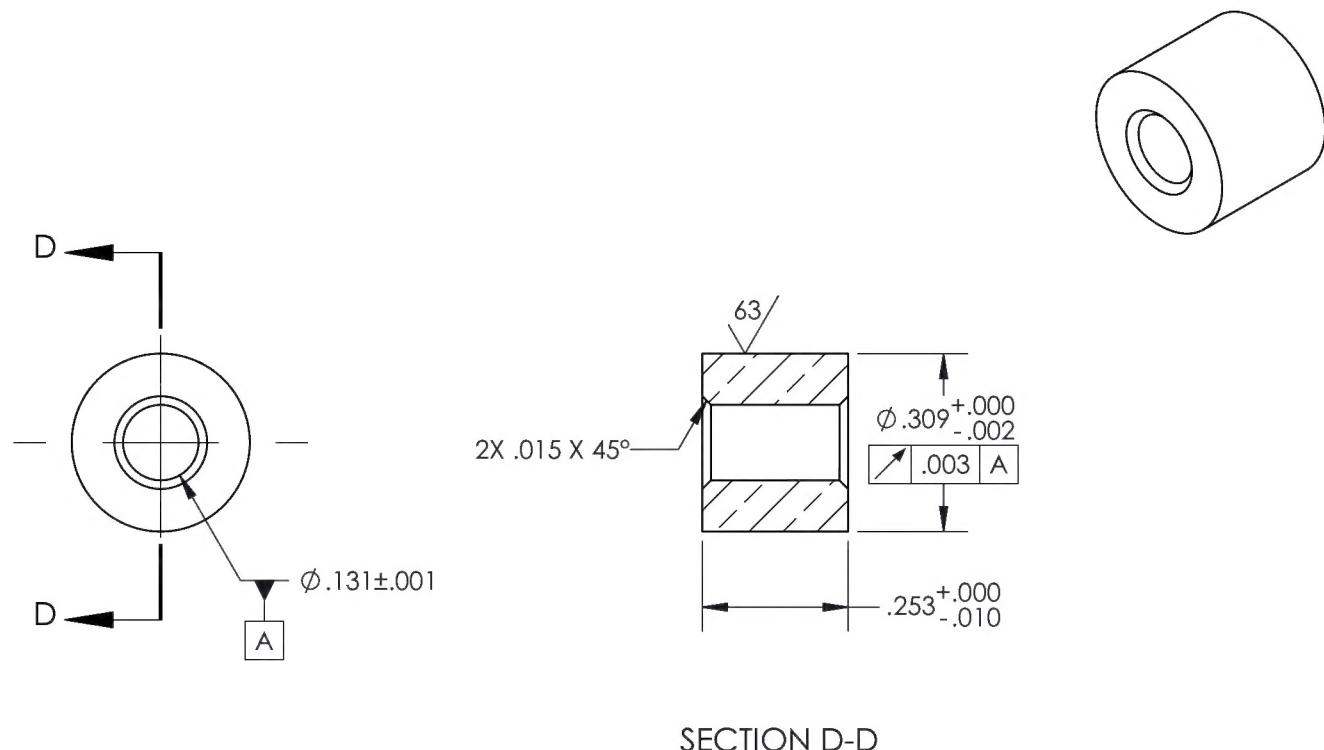
REV		ECR		DESCRIPTION			DATE	INITIAL	APPROVED
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<b>DART</b> AEROSPACE	
<b>TITLE</b>	
<b>TRI-ROLLER SWAGING TOOL</b>	
<b>DWG NO.</b>	<b>RBST2854-5</b>
<b>MAT'L</b>	<b>STEEL</b>
<b>DRAWN BY:</b>	<b>GILBERT</b>
<b>APPROVED</b>	<b>D. Weil</b>
<b>UNLESS OTHERWISE SPECIFIED</b>	<b>DIMENSIONS ARE IN INCHES</b>
$.XXX \pm .005$	<b>FRACTIONS <math>\pm 1/8</math></b>
$.XX \pm .01$	<b>ANGLES <math>\pm 5^\circ</math></b>
$.X \pm .1$	
<b>1. BREAK ALL SHARP EDGES .015 x 45°</b>	<b>HEAT TREAT</b>
<b>OR .015R</b>	<b>RC 55-60</b>
<b>2. DIMENSIONAL LIMITS APPLY AFTER</b>	<b>FINISH</b>
<b>PLATING</b>	<b>SPEC</b>
	<b>USED ON MODEL</b>
	<b>212-310-701-103</b>
<b>SCALE</b>	<b>4:1</b>
<b>DATE</b>	<b>5/20/2013</b>
<b>SHEET 4 OF 10</b>	

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REV	ECR	REVISIONS	DESCRIPTION	DATE	INITIAL	APPROVED
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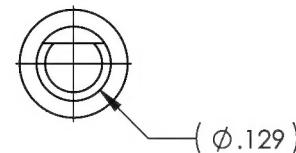
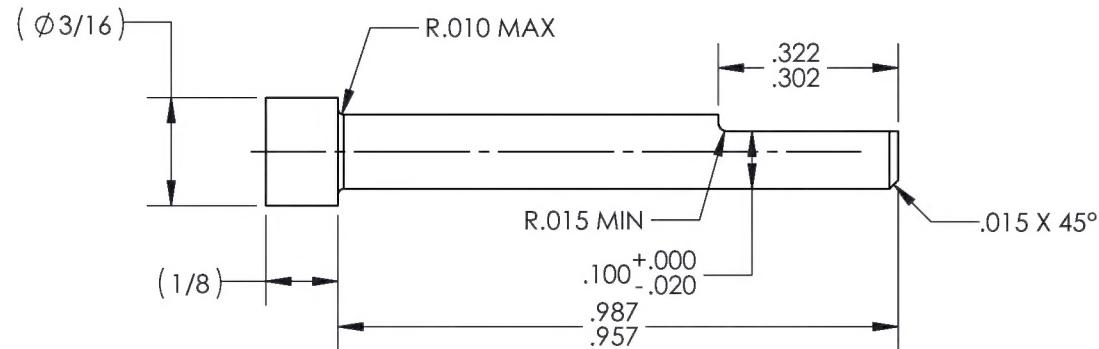
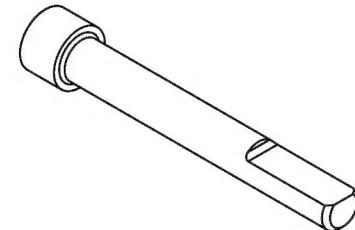
SECTION D-D

(-7)  
GUIDE

DART AEROSPACE	
TITLE	TRI-ROLLER SWAGING TOOL
DWG NO.	RBST2854-7
MAT'L	DRAWN BY: GILBERT
BRONZE RND BAR	APPROVED <i>D Weil</i>
UNLESS OTHERWISE SPECIFIED	
DIMENSIONS ARE IN INCHES	
.XXX ± .005	FRACTIONS ± 1/8
.XX ± .01	ANGLES ± 5°
.X ± .1	
1. BREAK ALL SHARP EDGES .015 x 45°	
OR .015R	HEAT TREAT FINISH
2. DIMENSIONAL LIMITS APPLY AFTER	SPEC
PLATING	USED ON MODEL
	212-310-701-103
SCALE 3:1	DATE 5/20/2013
	SHEET 5 OF 10

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1	14-0185	-9 CH'D DIM WAS $\varnothing$ .241 IS ( $\varnothing$ .188), WAS $\varnothing$ .129 +.000 -.001 IS ( $\varnothing$ .129).	10/15/2014	DJN	JAG



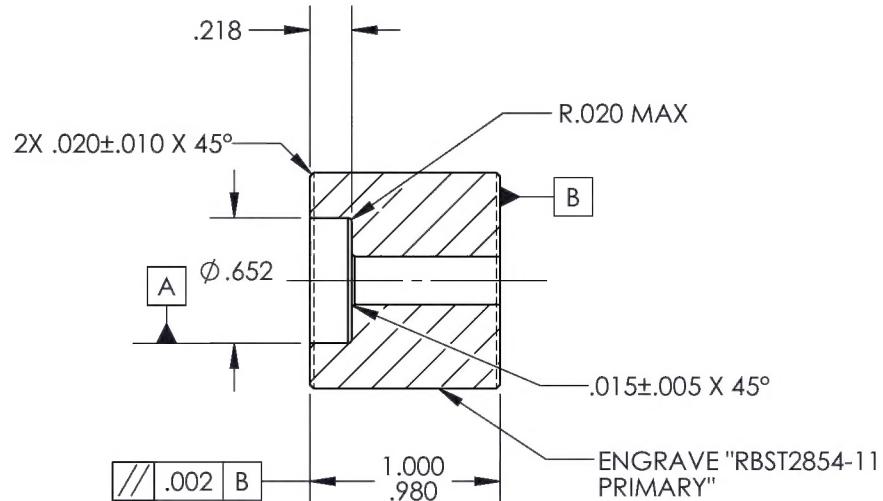
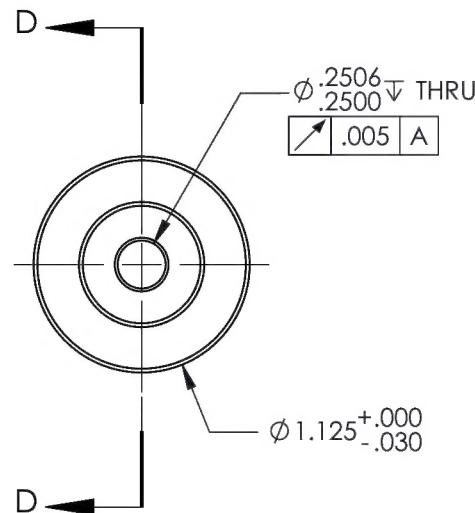
(-9)

PIN

<b>DART</b> AEROSPACE	
TITLE	TRI-ROLLER SWAGING TOOL
DWG NO.	RBST2854-9
MAT'L	STEEL
DRAWN BY:	GILBERT
APPROVED	D Weil
UNLESS OTHERWISE SPECIFIED	
DIMENSIONS ARE IN INCHES	
.XXX ± .005	FRACTIONS ± 1/8
.XX ± .01	ANGLES ± 5°
.X ± .1	
1. BREAK ALL SHARP EDGES .015 x 45°	
OR .015R	HEAT TREAT FINISH
2. DIMENSIONAL LIMITS APPLY AFTER	
PLATING	SPEC USED ON MODEL
	212-310-701-103
SCALE	3:1
DATE	5/20/2013
SHEET 6 OF 10	

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REV			ECR			DESCRIPTION			DATE			INITIAL			APPROVED		
1	14.0185		-11 CH'D ENGRAVE NOTE.						10/15/2014			DJN			JAG		



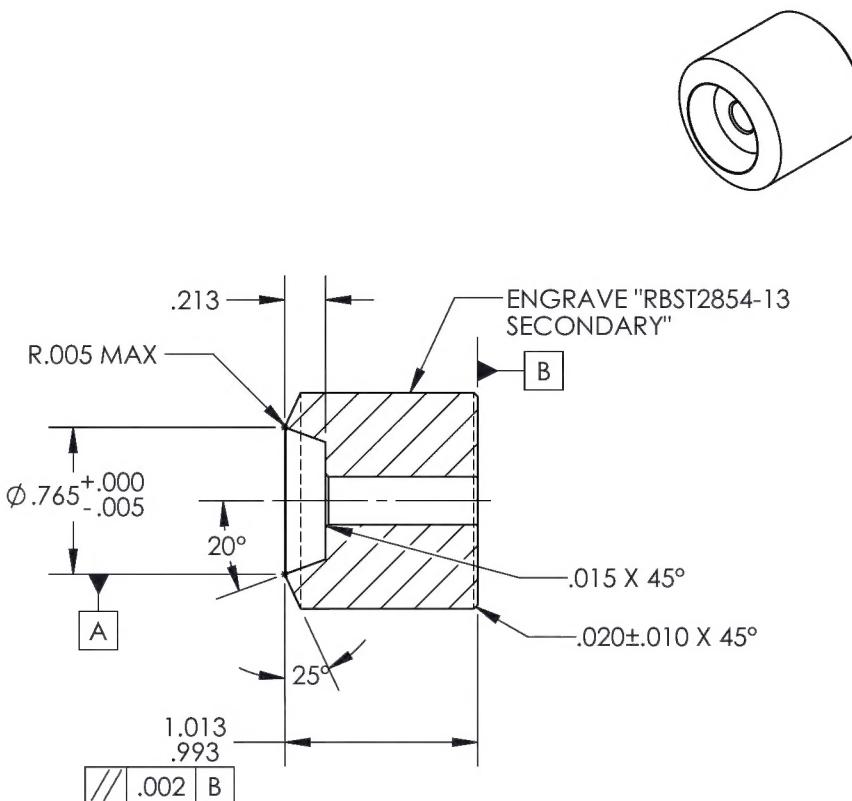
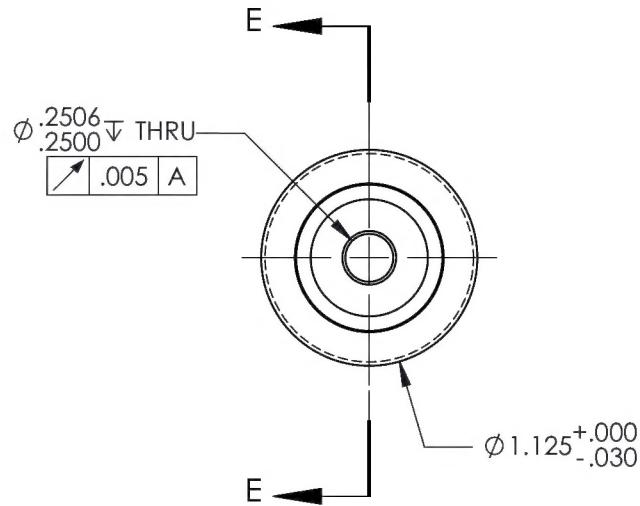
SECTION D-D

(11)  
PRIMARY SEAT

<b>DART</b> AEROSPACE		
TITLE		
TRI-ROLLER SWAGGING TOOL		REV 1
DWG NO.	RBST2854-11	
MAT'L	4140 Q & T	DRAWN BY: GILBERT
UNLESS OTHERWISE SPECIFIED		APPROVED <i>D. Weil</i>
DIMENSIONS ARE IN INCHES		HEAT TREAT
.XXX $\pm$ .005	FRACTIONS $\pm$ 1/8	FINISH BLACK OXIDE
.XX $\pm$ .01	ANGLES $\pm$ 5°	
.X $\pm$ .1		SPEC
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R		USED ON MODEL
2. DIMENSIONAL LIMITS APPLY AFTER PLATING		212-310-701-103
SCALE	1:1	DATE 5/20/2013
		SHEET 7 OF 10

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REV			ECR			DESCRIPTION			REVISIONS		
1	14-0185	-13 CH'D ENGRAVE NOTE.							DATE	INITIAL	APPROVED
									10/15/2014	DJN	JAG



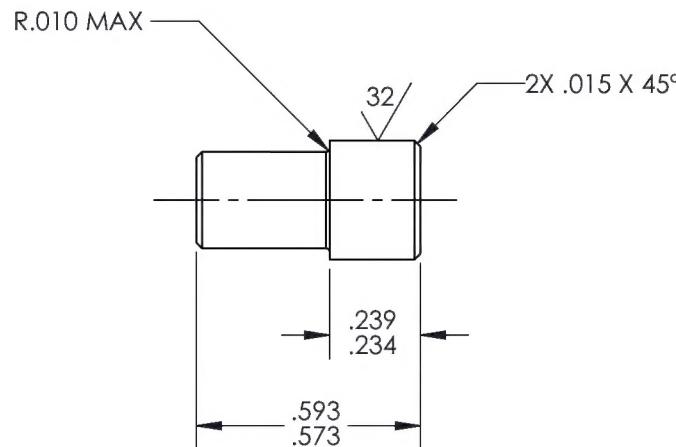
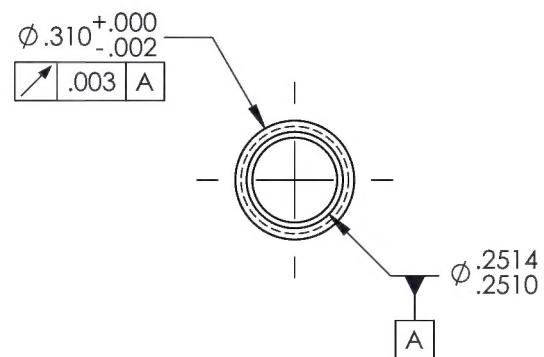
SECTION E-E

(-13)  
SECONDARY SEAT

 <b>TRI-ROLLER SWAGING TOOL</b>		TITLE	DWG NO.	DRAWN BY:	REV
			RBST2854-13		
MAT'L	4140 Q & T				
UNLESS OTHERWISE SPECIFIED	DIMENSIONS ARE IN INCHES			APPROVED	
.XXX ± .005	FRACTIONS ± 1/8			GILBERT	
.XX ± .01	ANGLES ± 5°			D Weil	
.X ± .1				HEAT TREAT	
				FINISH	BLACK OXIDE
1. BREAK ALL SHARP EDGES .015 X 45°				SPEC	
OR .015R				USED ON MODEL	
2. DIMENSIONAL LIMITS APPLY AFTER				212-310-701-103	
PLATING					
SCALE	1:1	DATE	5/20/2013	SHEET	8 OF 10

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REV	ECR	REVISIONS	DESCRIPTION	DATE	INITIAL	APPROVED
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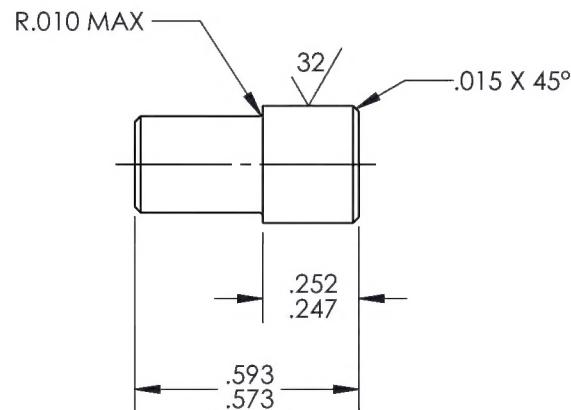
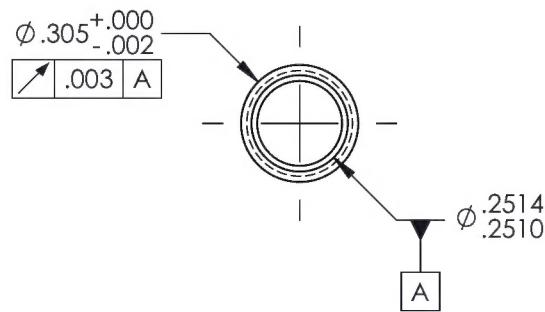
(-15)

LOCATING PIN

<b>DART</b> AEROSPACE	
TITLE TRI-ROLLER SWAGING TOOL	
DWG NO.	REV 1
RBST2854-15	
MAT'L 1018	DRAWN BY: GILBERT
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>D Weil</i>
.XXX ± .005	FRACTIONS ± 1/8
.XX ± .01	ANGLES ± 5°
.X ± .1	HEAT TREAT
	FINISH BLACK OXIDE
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	SPEC
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	USED ON MODEL
	212-310-701-103
SCALE 2:1	DATE 5/21/2013
	SHEET 9 OF 10

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REV		ECR		REVISIONS		
				DESCRIPTION		DATE
				INITIAL	APPROVED	



-17  
LOCATING PIN

DART AEROSPACE	
TITLE: TRI-ROLLER SWAGING TOOL	
DWG NO.	REV 1 RBST2854-17
MAT'L 1018	DRAWN BY: GILBERT APPROVED <i>D. Weil</i>
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
.XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ± 5° .X ± .1	
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
HEAT TREAT FINISH BLACK OXIDE SPEC USED ON MODEL 212-310-701-103	
SCALE 2:1	DATE 5/21/2013
SHEET 10 OF 10	